

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A media router comprising:

a media routing control part for giving a fixed unit of time stamp, a TS (Transport Stream) packet number, to ~~every~~ each TS packet of a TS (~~Transport Stream~~) of a digital broadcasting or an analog broadcasting signal, and extracting index information including at least one of the TS packet number and information on a type of picture from the TS having the time stamp added thereto; and;

a storage part for receiving and storing the TS having the time stamp added thereto and the index information from the media routing control part ~~and storing therein~~.

2. (Currently Amended) A The media router as claimed in claim 1, wherein the media routing control part includes;

a multiplexer for selecting and forwarding one of the TSs of the digital broadcasting signal and the analog broadcasting signal;

a format converting part for giving a the time stamp to the TS from the multiplexer to synchronize, and extracting the index information; and

a demultiplexer for selecting one of outputs of the multiplexer and the format converting part.

3. (Currently Amended) A The media router as claimed in claim 2, further comprising:

a scrambling/descrambling part for scrambling the TS having the time stamp given

thereto and the index information or descrambling scrambled information from the storage part.

4. (Currently Amended) A The media router as claimed in claim 1, wherein the TS and the index information from the media routing control part are stored in the storage part through a PCI (Peripheral Component Interface) bus.

5. (Currently Amended) A The media router as claimed in claim 1, wherein the storage part includes;

a system memory for storing the TS and the index information from the media routing control part; and

a storage medium for receiving the TS and the index information stored in the system memory and storing the TS and the index information, again.

6. (Currently Amended) A The media router as claimed in claim 5, wherein the TS and the index information stored in the system memory is stored in the storage medium by DMA (Direct Memory Access) transmission.

7. (Currently Amended) A The media router as claimed in claim 5, wherein the storage medium is either an HDD (Hard Disc Drive) or a DVD (Digital Versatile Disc).

8. (Canceled).

9. (Currently Amended) A media router comprising;

a PID (Program Identification) filter part for selecting only a TS (Transport Stream) of a desired program from a received digital broadcasting signal and forwarding the TS;

an MPEG-2 encoder for coding a received analog broadcasting signal into an MPEG-2 TS format, and forwarding the coded analog broadcasting signal;

a media routing control part for giving a time stamp to ~~every~~ each TS packet from the PID filter part or ~~every~~ each TS packet of the analog broadcasting signal from ~~an~~ the MPEG-2 encoder to; synchronize the TS packet, and extracting index information including at least one of a TS packet number and information on a type of picture;

a memory part for storing the TS synchronized at the media routing control part and the index information; and

a decoding part for receiving, decoding, and displaying a broadcasting signal or a signal reproduced through the memory part, and the media routing control part.

10. (Currently Amended) A The media router as claimed in claim 9, wherein the media routing control part includes;

a multiplexer for selecting and forwarding one of the TSs of the digital broadcasting signal and the analog broadcasting signal;

a format converting part for giving a the time stamp to the TS from the multiplexer to synchronize, and extracting index information;

a demultiplexer for selecting one of outputs of the multiplexer and the format converting part; and

a scrambling/descrambling part for scrambling the TS having the time stamp given thereto and the index information or descrambling scrambled information from the storage part.

11. (Currently Amended) A The media router as claimed in claim 9, wherein the storage part includes;

a system memory for storing the TS and the index information from the media routing control part; and

a storage medium for receiving the TS and the index information stored in the system memory and storing the TS and the index information, again.

12. (Currently Amended) A The media router as claimed in claim 11, wherein the TS and the index information stored in the system memory is stored in the storage medium by DMA (Direct Memory Access) transmission.

13. (Currently Amended) A The media router as claimed in claim 9, wherein the TS and the index information from the media routing control part are stored in the storage part through a PCI bus (Peripheral Component Interface).

14. (Canceled).

15. (Currently Amended) A method for recording a broadcasting signal by using a media router having a media routing control part and a storage medium, the method comprising the

~~steps of:~~

(a) selecting one of TSs (Transports Streams) of a received digital broadcasting signal and a received analog broadcasting signal;

(b) adding a time stamp to a selected TS to synchronize, and extracting index information including at least one of a TS packet number and information on a type of picture, for converting a format of the TS; and;

(c) storing the TS having the time stamp added thereto and the index information in a storage medium.

16. (Currently Amended) A The method as claimed in claim 15, further comprising the ~~steps of:~~

determining whether a format converted TS is scrambled or not; and;

scrambling and storing the TS if the TS is to be scrambled as a result of the determination, and storing the TS without scrambling the TS if the TS is not to be scrambled as a result of the determination.

17. (Currently Amended) A The method as claimed in claim 15, further comprising ~~the step of:~~

setting a password at the storage medium to inhibit recording/reproduction after the step (c).

18. (Currently Amended) A method for reproducing a broadcasting signal by using a

media router having a media routing control part and a storage medium, the method comprising the steps of:

(a) ~~converting formats of a time stamp and index information stored in the storage medium or a format of the TS only~~ a format of corresponding TS (Transport Stream) packets within the storage medium with reference to index information including a TS packet number, type of picture and a time stamp given to each TS packet stored in the storage medium, when a trick mode reproduction is to be performed; and;

(b) decoding, and displaying a format converted TS.

19. (Currently Amended) A The method as claimed in claim 18, wherein the step (a) includes ~~the step of~~ descrambling the TS before the format conversion, if the TS stored in the storage medium is in a scrambled state.

20. (Canceled).